

WHAT IS CLAIMED IS:

1. A resending apparatus for resending an input signal transmitted from a movable transmitting end and having a guard interval period for each symbol duration, comprising:

a determining unit for determining whether the input signal is to be resent or not, based on the information of the guard interval period of the input signal; and

a control unit for restricting the process of resending an input signal determined by the determining unit as a signal other than to be resent.

2. A resending apparatus according to Claim 1, wherein in the case where the control unit, upon determination that an input signal is other than to be resent, performs selected one of suspending the process of resending the input signal and resending said resent signal by suppressing the level of the resent signal to a degree ignorable at the receiving end.

3. A resending apparatus according to Claim 1, wherein the control unit determines an input signal to be other than to be resent, in the case where the input signal is selected one of a signal of a different type having no guard interval period, a signal reduced in level to such an extent that the guard interval period cannot be detected, and a signal mixed with a reflected wave over the guard interval

period causing an interference with a delay wave to such an extent that the guard interval period cannot be detected.

4. A resending apparatus for resending an input signal received from a movable transmitting end and having a guard interval period containing a part of the information included in each symbol duration, comprising:

an amplifier unit for amplifying the input signal and outputting the amplified signal as a resent signal;

a delay unit for delaying the input signal by a time length corresponding to one valid symbol duration;

a determining unit for determining the degree of correlation between a part of the input signal and the guard interval period of the signal delayed by the delay unit; and

a control unit for restricting the resending operation of the amplifier unit in the case where the degree of correlation of the input signal determined by the determining unit is lower than a predetermined degree and the input signal is other than to be resent.

5. A resending apparatus according to Claim 4, wherein the control unit, upon determination that the input signal is other than to be resent, performs selected one of the operation of restricting the amplification of the input signal by the amplifier

unit and the operation of suspending or suppressing the output of the amplifier unit to a very small level.

6.           A resending apparatus according to Claim 4, wherein the determining unit determines an input signal as a signal other than to be resent, in the case where the input signal is selected one of a signal of a different type having no guard interval period, a signal reduced in level to such an extent that the guard interval period cannot be detected, and a signal mixed with a reflected wave over the guard interval period causing an interference with a delay wave to such an extent that the guard interval period cannot be detected.

7.           A resending apparatus according to Claim 4, wherein the amplifier unit amplifies the input signal and outputs the amplified signal as a resent signal having a predetermined level.

8.           A resending apparatus according to Claim 4, wherein the amplifier unit amplifies the input signal and outputs the amplified signal as a resent signal having the same frequency as the input signal.

9.           A resending apparatus according to Claim 4, wherein the control unit, upon determination of an input signal as a signal to be resent, performs the resending operation by the amplifier unit at least for one symbol duration, and upon determination of the input signal as a signal other than to be resent,

suspends the resending operation of the amplifier unit.

10. A resending apparatus according to Claim 4,  
wherein the determining unit includes a multiplier for multiplying a part of the input signal and the guard interval period of the signal delayed by the delay unit with each other, and a level determiner for determining that the input signal is to be resent in the case where the product is not less than a predetermined value.

11. A resending apparatus according to Claim 4,  
wherein the determining unit includes a subtractor for producing the difference between a part of the input signal and the guard interval period of the signal delayed by the delay unit, and a level determiner for determining that the input signal is to be resent in the case where the product is not more than a predetermined value.

12. A resending method for resending an input signal received from a movable transmitting end and having a guard interval period for each symbol duration, comprising the steps of:

determining whether the input signal is to be resent or not, based on the information of the guard interval period of the input signal; and

restricting the resending process of the input signal in the case where the input signal is determined as other than to be resent.

13. A resending method for resending an input

signal received from a movable transmitting end and having a guard interval period containing a part of the information included in each symbol duration, comprising the steps of:

delaying the input signal by the time length corresponding to one valid symbol duration;

determining the degree of correlation between a part of the input signal and the guard interval period of the signal delayed by the delay unit; and

restricting the resending operation of amplifying the input signal and outputting the amplified signal as a resent signal in the case where the degree of correlation is low and the input signal is other than to be resent.